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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,092	07/18/2001	Antonio Mugica	38146	7392

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[REDACTED] EXAMINER

SORRELL, ERON J

ART UNIT	PAPER NUMBER
2182	2

DATE MAILED: 06/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/682,092	MUGICA ET AL.
Examiner	Art Unit	
Eron J Sorrell	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-18 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-18 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) Other: _____

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

1. The disclosure is objected to because of the following informalities: there is no written description of figures 3 and

4. Both a brief description and a detailed description of the above mentioned figures are required or the figures may be deleted from the specification.

2. Please check the entire specification and correct all minor typographical and/or grammatical errors.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Necessary structural cooperative relationships of elements described in the applicant's specification critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). It is unclear what the structural relationship is between the listed elements in independent claims 1 and 10 without undue experimentation. A mere list of parts does not suffice this requirement.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1,2,5,6,8-11,14,15,17, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Crater et al. (U.S. Patent No. 6,201,996 hereinafter Crater).

7. Referring to apparatus claim 1 and method claim 10, Crater teaches an object-oriented controller in which abstraction is accomplished by the inclusion of interfaces between the hardware, software and network elements, the controller comprising:

(a) hardware with a processing means using an operating system that runs an application, the application made of a plurality of micro-objects from a micro-object library (see lines 47-56 of column 4 and item labeled 12 in figure 1);
a memory means (see items labeled 114 in figure 1);
an Input/Output (I/O) means (see lines 1-14 of column 8); and
a communication means (see item labeled 160 in figure 1);

(b) a Monitoring Graphics User Interface interfacing to a plurality of hardware through the hardware's application (see lines 6-10 of column 4); and

(c) a network adapter that receives from and sends data to a plurality of hardware through the hardware's communication means (see item labeled 125 in figure 1).

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8. Referring to apparatus claim 2 and method claim 11, Crater discloses the communication from the hardware to the network adapter consists of a send and receive function (see lines 59-65 of column 8 and also note the bi-directional communication link coupling items 125 and 160 in figure 1).

9. Referring to apparatus claims 5 and 6, and method claims 14 and 15, Crater discloses the Monitoring Graphics User Interface is contained on a computing means and interfaces to a plurality of hardware through the network adapter (see lines 6-19 of column 4).

10. Referring to apparatus claim 8 and method claim 17, Crater discloses the micro-object library is created with a plurality of micro-objects each with its own methods and capabilities (see lines 45-56 of column 4; Note the database disclosed by Crater is the micro-object library).

11. Referring to apparatus claim 9 and method claim 18, Crater discloses that wherein changing hardware, a new set of micro-objects for the new hardware will be used that will contain methods and data structures analogue to the old set of micro-

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objects used by the old hardware (see lines 52-67 of column 10 and lines 1-16 of column 11).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crater in view of TCP/IP Illustrated Volume 1; Stevens, W. Richard; 1994 hereinafter "Stevens").

14. Referring to apparatus claim 3 and method claim 12, Crater discloses the communication from the hardware to the network adapter consists of a send and receive function with a logical ID being assigned to each hardware device (see lines 53-64 of column 5). Crater further discloses that any consistent protocol may be used and suggest the use of the Internet Protocol (IP), the Transmission Control Protocol (TCP/IP) or both (TCP/IP) (see lines 53-64 of column 5).

Crater fails to explicitly set forth the limitation that the send function uses four parameters:

Service, whether an acknowledgment is needed;
Destination hardware;
Source hardware; and
Length, which is the length of the data packet to be sent.

Stevens teaches the TCP header comprises:

Service, whether an acknowledgment is needed;
Destination hardware;
Source hardware; and
Length, which is the length of the data packet to be sent (see pages 225-227).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the apparatus or method of Crater with the teachings of Stevens such that send function utilizes the four listed parameters. One of ordinary skill in the art would have been motivated to make such modification so the controller can be used in existing networks that use the TCP protocol for data transmissions and the use of that particular protocol is clearly suggested by Crater.

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15. Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crater in view of Bernaden, III et al. (U.S. Patent No. 6,477,439 hereinafter Bernaden).

16. Referring to apparatus claim 4 and method claim 13, Crater fails to disclose the Monitor Graphics User Interface is used to download the application to the hardware.

Bernaden discloses an object-oriented based controller wherein applications are downloaded from the Monitor Graphics User Interface to the hardware (see figure 4 and lines 7-46 of column 4).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the apparatus of and method of Crater with that of Bernaden such that applications are downloaded from the Monitor Graphics User Interface to the hardware. This modification would allow the remote hardware to be controlled without actually being at the same physical location as the remote hardware as suggested by Bernaden (see abstract).

17. Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crater in view of Goldberg et al. (U.S. Patent No. 5,058,109 hereinafter Goldberg).

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18. Referring to apparatus claim 7 and method claim 16, Crater discloses a network adapter (see item labeled 125 in figure 1) but fails to explicitly set forth the limitation that the network adapter contains a mapping means to map a destination address with the corresponding logic and hardware address.

Goldberg teaches a network interface card comprising a mapping means to map a destination address with the corresponding logic and hardware address (see lines 9-20 of column 7).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the apparatus and method of Crater such that the network adapter contains a mapping means to map a destination address with the corresponding logic and hardware address in order for individual elements of the network to be sent data packets without having to broadcast the data packets to all the elements on the network.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is reminded that in amending in response to a rejection of claims,

the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objections made. Applicant must also show how the amendments avoid such references and objections. See 37 CFR § 1.111(c).

The following references are cited to further show the state of the art as it pertains to object-oriented based controllers:

U.S. Patent No. 6,259,958 to Steinman et al.

U.S. Patent No. 6,466,055 to Grand

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eron J Sorrell whose telephone number is 703 305-7800. The examiner can normally be reached on Monday-Friday 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery A Gaffin can be reached on 703 308-3301. The fax phone numbers for the organization where this application or proceeding is assigned are 703 746-7239 for regular communications and 703 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-3900.

EJS
June 2, 2003



JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100